

Adding and Subtracting Fractions with Like Denominators

R 4-1

How to find sums or differences of fractions with like denominators:

Find $\frac{2}{14} + \frac{6}{14}$. The fractions have like denominators, so you can just add the numerators.

$\frac{2}{14} + \frac{6}{14} = \frac{8}{14}$ Write the sum over the common denominator.

$\frac{8}{14} = \frac{4}{7}$ Simplify if possible.

Find $\frac{5}{7} - \frac{2}{7}$. The denominators are the same, so you can subtract the numerators.

$\frac{5}{7} - \frac{2}{7} = \frac{3}{7}$ $\frac{3}{7}$ cannot be simplified, so

$$\frac{5}{7} - \frac{2}{7} = \frac{3}{7}$$

Find each sum or difference. Simplify your answer.

1. $\frac{1}{6} + \frac{3}{6} =$ _____

2. $\frac{9}{11} - \frac{4}{11} =$ _____

3. $\frac{6}{7} - \frac{2}{7} =$ _____

4. $\frac{3}{12} + \frac{8}{12} =$ _____

5. $\frac{8}{9} - \frac{5}{9} =$ _____

6. $\frac{1}{10} + \frac{8}{10} =$ _____

7. $\frac{4}{15} + \frac{11}{15} =$ _____

8. $\frac{16}{20} - \frac{9}{20} =$ _____

9. **Number Sense** Give an example of two fractions whose sum can be simplified to $\frac{1}{2}$.

10. A quarter has a diameter of $\frac{15}{16}$ in. A dime has a diameter of $\frac{11}{16}$ in., and a nickel has a diameter of $\frac{13}{16}$ in. If you put each coin side by side, what is the combined width of the three coins?
